



Site 7 Salisbury Ballfield

Overview: The Ballfield potential restoration site is located on the north side of Route 1A (Beach Road) approximately 0.3 mi west of Salisbury Beach. The potential restoration site is contained on a municipally-owned parcel which currently includes two ballfields and a small parking area abutting Beach Road. The property includes approximately 3 ac of former salt marsh filled after 1952 based on a review of historical USGS mapping (Newburyport East, MA-NH Quadrangle USGS 7.5 Minute Series). The Town recently completed a new soccer field north of the older baseball field. Conversations with the Director or Public Works indicated that the remaining fill area of approximately 20,000 sq ft would be available for salt marsh restoration. This portion of the potential restoration site is not forested; instead it is dominated by vegetation typically found in coastal dune, maritime grassland and maritime shrubland communities. Typical borings taken from the potential restoration site consisted of 2.5 to 3 ft of light grey to dark brown medium-fine sand over the original peat surface. A comparison of the elevation of the buried marsh horizon with the adjacent marsh suggests the former marsh plain is generally 0.5 to 1 ft lower due to the compression of the organic soils. The ditches adjacent to the filled wetlands are connected to Dead Creek which extends in a northerly direction to the Blackwater River and ultimately Hampton-Seabrook Harbor.

Structure conditions: There are no structures associated with this potential restoration site.

Ecological Integrity: The potential restoration site consists of 3 to 4 ft of light grey to dark brown medium-fine sand fill over the original salt marsh plain. The area available for restoration is dominated by vegetation typically found in coastal dune, maritime grassland and maritime shrubland communities. There are narrow stands of Phragmites fringing the upland fill around most of the area which are expanding into the surrounding marsh. One nearby population occupies a slightly elevated portion of a creek bank just east of the filled wetlands. With the exception of the encroaching stands of Phragmites, the adjacent salt marsh exhibits a high degree of ecological integrity with diverse habitat types including large salt pannes. The limits of the municipally owned parcel include a portion of the existing marsh to the north and east. The western edge of the parcel is connected to lands held by MassWildlife. The area is contained within BioMap Core Habitat and is mapped as Priority Habitat for State-Protected Rare Species and Estimated Habitat for Rare Wildlife. Land uses along Beach Road are high density residential and recreational land. Dead Creek is mapped as suitable habitat for soft- shelled clam.

There were no tide data collected for this potential restoration site. Existing ditches adjacent to the filled wetlands are generally well-maintained and if necessary could be extended into the work area. Overall, the existing impairments are considered severe as a filled wetland. However, the potential restoration site is providing some maritime upland habitat. Removal of the fill material to an elevation near or slightly below the adjacent marsh will restore salt marsh habitat and lost flood storage volume. The restoration effort should include the construction of perimeter ditches within and adjacent to the fill removal area in order to minimize the further encroachment of *Phragmites* onto the marsh plain. The restoration will result in the conversion of man-made coastal dune or bank. Although the upland area is currently relatively free of invasive vegetation, the adjacent stands of *Phragmites* will likely expand into this area and compromise the floristic integrity of this coastal habitat. No impacts to abutting developed lands are anticipated. Efforts should be taken to maintain a visual and vegetative buffer between the restoration area and the proposed soccer field.

Socioeconomic: Recreational values of the potential restoration site are enhanced by the excellent public access and wildlife viewing opportunities provided by the adjacent recreational lands, as





well as available on-site parking. The municipal ownership status, good access, and level of use by children greatly enhance educational opportunities. However, there is no known ongoing research or nearby schools. The potential restoration site's Uniqueness/Heritage value is enhanced by its status as a Priority Habitat for State-Protected Rare Species and Estimated Habitat for Rare Wildlife. The potential restoration site does not include any known cultural resource elements or urban setting values.

Construction Logistics/Feasibility: The restoration potential for this site is enhanced by the limited size and scope of the restoration effort, excellent construction access and staging areas, lack of negative impacts to low lying abutters, and the lack of above or below ground utilities. Construction costs, based on the removal of approximately 2,500 cubic yds of fill, are estimated to be \$75,000. The restoration opportunity also has a high level of local support, and may be considered as mitigation for other municipal projects (L. Pearson, Salisbury Planning Agent, pers. comm.).

Restoration Potential: The potential restoration site is considered to have moderate restoration potential based on the presence of several important socioeconomic factors including the high recreational and educational value, public land status, and the extent of the existing impairments. In addition to removing historic fill from the salt marsh, the project can control further encroachment of *Phragmites* onto the marsh plain with perimeter ditching within and adjacent to the filled wetlands. The potential is limited solely by the relatively high cost per acre. Costs could be substantially reduced if the effort were tied to other municipal project requiring mitigation. Key steps toward implementation involve further coordination with the Town to examine the possibility of linking the construction efforts.







Photo 1 - Western Edge of Fill Viewing South



Photo 2 - Restoration Site Viewing East







Photo 3 - Eastern Portion of Restoration Area Viewing North



Photo 4 - Recent Clearing for Soccer Field





Great Marsh Coastal Wetlands Restoration Planning CZM Rapid Field Assessment





Site ID: 7 Site Name: Salisbury Bailfield Municipality Salisbury Location: North side of Route 1A, approximaticy 0.3 mi west of Structure Type: Structure 7 (Years): Road Condition: North side of Route 1A, approximaticy 0.3 mi west of Structure 1 (Width (Feet): Structure 2 (Years)	Site Information	Structure / Channel:
Silisbury Ballifeld Municipality Location: North side of Route 1A, approximately 0.3 mi west of Sellebury Beach Structure 1 Virith (Feet):	Site ID: 7	Overall Condition:
Municipality Salisbury Location: North aide of Route 1A, approximately 0.3 mi west of Salisbury Beach Adjacent Waterbody: Blackwater River O Total Area: O.5 Salit Marsh: O Other Description: Cover (Feet): Scour Protectection: Adequately Aligned: Headwall Type: Headwall Condition: Headwall Condition: Headwall Type: Headwall Condition: Headwall Condition: Waterbody: Waterbody: Headwall Condition: Waterbody: Headwall Condition: Waterbody: Headwall Condition: Waterbody: Headwall Condition: Waterbody: Water	Cita Nama	Life Expectancy (Years):
Location: North side of Route 1A, approximately 0.3 mi west of Salisbury Beach Structure 1 Length (Feet):		Road Condition:
Adjacent Waterbody: Slackwater River Structure 1 Width (Feet):	Municipality Salisbury	Structure Type:
Adjacent Waterbody: Blackwater River Affected Area (Acres)		Structure Age (Years)
Adjacent Waterbody: Blackwater River Affected Area (Acres)	Salisbury Beach	Structure 1 Width (Feet):
Affected Area (Acres)		Structure 1 Length (Feet):
Affected Area (Acres) Skew (Degrees): Skew (Degrees): Cover (Feet): Co	Adjacent Waterbody: Blackwater River	Structure 2 Width (Feet):
Affected Area (Acres) Mudflat/Open Water:	- Asjacolii Haloisooyi	Structure 2 Length (Feet):
Muditat/Open Water:		
Mudflat/Open Water:	Affected Area (Acres)	
Salt Marsh: Other Wetland: Other: Other: Other: Other: Other Description: Other: Other: Other Wetland: Other Description: Other:	Mudflat/Open Water: 0 Total Area: 0.5	,
Other Wetland: Other: Other: Other: Other Description: Other Description: Other Description: Other Description: Headwall Type: Headwall Condition: Surrounding Land Use % Commercial Industrial 40 Agricultural Other Domercial Industrial Type: Headwall Condition: Surrounding Land Sys % Commercial Industrial 40 Agricultural Other Headwall Type: Headwall Fights Surrounding Landseal Surrounded Surrounded Fide Surrounded Fide Surrounded Fide Surrounded Fide Surrounded Fide Surrounded F		
Other: Other:	Others Westered	Adequately Aligned:
Headwall Condition: Surrounding Land Use % Commercial / Industrial 0 Residential 40 Agricultural 0 Undeveloped 60 Severity of Impairments Severe Invasive Plant Cover: Medium Extent of Wooded Buffer: Poor Habitat Connectivity: Fair NHESP Estimated Habitats of Rare Wildlife: NHESP Priority Habitats of Rare Wildlife: NHESP BioMap Core Habitat: NHESP BioMap Supporting Natural Landscape: ACEC: Anadromous Fish: Shellfishing Suitability: Shellfishing Suitability: New York Plant Cover: Severe Poor Habitats of Rare Species: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellfishing Suitability: NHESP BioMap Supporting Natural Landscape: Anadromous Fish: Shellf	Other Description.	Headwall Type:
Tidal Restriction	Other: 0.5 Fill	Headwalll Condition:
Tidal Restriction		
Obstructed Ditche(s)	Impairment(s)	Ecological Integrity / Habitat Value
Impoundment	Tidal Restriction Fill	Surrounding Land Use %
Severity of Impairments Severe Agricultural Undeveloped 60 Severe Invasive Plant Cover: Medium	Obstructed Ditche(s) Invasive Species	Commercial / Industrial 0
Severity of Impairments Severe	Impoundment Pollution / Siltation	Residential 40
Project Type	Source Languism onto	Agricultural 0
Project Type Roadway Culvert(s) Obstructed Ditches Extent of Wooded Buffer: Poor Bridge Fill ✓ Berm Other Habitat Connectivity: Fair NHESP Estimated Habitats of Rare Wildlife: ✓ NHESP Priority Habitats of Rare Species: ✓ NHESP BioMap Core Habitat: ✓ NHESP BioMap Supporting Natural Landscape: □ ACEC: □ Upstream Scour Pool Invasive Species Anadromous Fish: □ Shellfishing Suitability: ✓	Seventy of impairments Severe	Undeveloped 60
Roadway Culvert(s) Obstructed Ditches Extent of Wooded Buffer: Poor Habitat Connectivity: Fair NHESP Estimated Habitats of Rare Wildlife: NHESP Priority Habitats of Rare Species: NHESP BioMap Core Habitat: NHESP BioMap Supporting Natural Landscape: NHESP BioMap Supporting Natural Landscape: ACEC: Anadromous Fish: Shellfishing Suitability: Shellfishing Suitability:	Project Type	Severity of Impairment(s)
Bridge Fill V	Trojeci Type	Invasive Plant Cover: Medium
Berm Other NHESP Estimated Habitats of Rare Wildlife: NHESP Priority Habitats of Rare Species: NHESP BioMap Core Habitat: NHESP BioMap Supporting Natural Landscape:	Roadway Culvert(s) Obstructed Ditches	Extent of Wooded Buffer: Poor
NHESP Estimated Habitats of Rare Wildlife: NHESP Priority Habitats of Rare Species: NHESP BioMap Core Habitat: NHESP BioMap Core Habitat: NHESP BioMap Supporting Natural Landscape: NHESP BioMa	Bridge ☐ Fill ✓	Habitat Connectivity: Fair
Evidence of Restriction NHESP BioMap Core Habitat: Gauge Data Impounded Flow Downstream Scour Pool Obstructed Flow Upstream Scour Pool Invasive Species Bank Erosion Ponded Conditions NHESP BioMap Supporting Natural Landscape: ACEC: Anadromous Fish: Shellfishing Suitability: ▼	Berm Other	NHESP Estimated Habitats of Rare Wildlife:
Gauge Data Impounded Flow Downstream Scour Pool Upstream Scour Pool Bank Erosion Impounded Flow Obstructed Flow Invasive Species Ponded Conditions Subside see See See See Showap Core Habitat. NHESP BioMap Supporting Natural Landscape: ACEC: Anadromous Fish: Shellfishing Suitability:		NHESP Priority Habitats of Rare Species: ✓
Downstream Scour Pool	Evidence of Restriction	NHESP BioMap Core Habitat: ✓
Upstream Scour Pool Invasive Species Anadromous Fish: Bank Erosion Ponded Conditions Shellfishing Suitability:	Gauge Data Impounded Flow	NHESP BioMap Supporting Natural Landscape:
Bank Erosion	Downstream Scour Pool	ACEC:
Characters — Streinisting Suitability.	Upstream Scour Pool	Anadromous Fish:
Character	Bank Erosion Donded Conditions	Shellfishing Suitability: 🔽
	Slumping Subsidence	



Great Marsh Coastal Wetlands Restoration Planning



Site # 7 Salisbury Ballfield



Traffic Volume	Construction Logistics / Feasibility	Socioeconomic	
Site Access Good Watercraft / Portage: Ongoing Research: High Saftey Concerns Wildlife Viewing: Education / Outreach Potential: High Saftey Concerns Minimal Low Lying Property Concerns None Uniqueness / Heritage Value Rare Species Habitat: ACEC: Cultural Resource Features Urban Viewscape Value: None Urban Habitat Value: Urban	Traffic Volume None	Recreation Education	
Staging Areas Staging Areas V	Detour Potential	Public Access: Schools Nearby:	
Fill Material Concern Minimal	Site Access Good	Watercraft / Portage: Ongoing Research:	
Uniqueness / Heritage Value Rare Species Habitat: Underground Utilities Water	Staging Areas	Wildlife Viewing: Education / Outreach Potential: High	
Overhead Utility Constraint None Rare Species Habitat: ACEC: Cultural Resource Features Urban Viewscape Value: None Urban Habitat Value: Urban Habitat Va	Fill Material Concern Minimal	Saftey Concerns (Access):	
Underground Utilities Water Telephone Cultural Resource Features Urban Viewscape Value: None Urban Habitat Value: None Permitting Complexity Medium None Urban Habitat Value: None Permitting Cost 10,000 Dates of 1st Survey: Date of Highest Tide: Max Measured Tidal Dampening: Total Cost 110,000 Tidal Prism: Measured Delay: Dates of 2nd Survey: Date of Highest Tide: Max Measured Delay: Dates of 2nd Survey: Date of Highest Tide: Max Measured Delay: Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening: Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening: Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening: Dates of 2nd Dampening: Dates of	Low Lying Property Concerns None	Uniqueness / Heritage Value	
Water Telephone Gas Sewer Urban Viewscape Value: None Urban Habitat Value: N	Overhead Utility Constraint None	Rare Species Habitat:	
Gas Sewer Urban Viewscape Value: None Viewscape Value: None	Underground Utilities	ACEC:	
Electric Drainage Urban Habitat Value: None Permitting Complexity Medium Local Support Yes Feasibility Cost 10,000 Design Cost 15,000 Permitting Cost 10,000 Construction Cost 75,000 Total Cost 110,000 Relative Cost/Acre 220,000 Total Cost 220,000 Date of Highest Tide: Measured Tidal Dampening: Finish: Dates of 2nd Survey: - Date of Highest Tide: Measured Tidal Dampening: Finish: Dates of 2nd Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Finish:	Water Telephone	Cultural Resource Features	
Permitting Complexity Local Support Feasibility Cost Design Cost Permitting Cost Tide Surveys Dates of 1st Survey: Date of Highest Tide: Max Measured Tidal Dampening: Percent of Tidal Prism: Measured Delay: Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening: Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening:		Urban Viewscape Value: None	
Tide Surveys Start: Finish: Dates of 1st Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Measured Delay: Dates of 2nd Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Measured Delay: Dates of 2nd Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Measured Delay: Dates of 2nd Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Max Measur	Electric	Urban Habitat Value: None	
Feasibility Cost 10,000 Dates of 1st Survey: - Date of Highest Tide: Max Measured Delay: Date of Highest Tide: Start: Finish: Date of Highest Tide: Start: Finish: Date of Highest Tide: Finish: Finish: Date of Highest Tide: Max Measured Delay: Date of Highest Tide: Max Measured Tidal Dampening: Finish: Finish: Date of Highest Tide: Max Measured Tidal Dampening:	Permitting Complexity Medium		
Design Cost 15,000 Dates of 1st Survey: - Date of Highest Tide: Max Measured Tidal Dampening: Date of Highest Tide: Max Measured Tidal Dampening: Date of Highest Tide: Date of High	Local Support Yes	Tide Surveys	
Design Cost 15,000 Date of Highest Tide:	Feasibility Cost 10,000		
Date of Highest Tide: Max Measured Tidal Dampening:	Design Cost 15.000		
Construction Cost 75,000 Percent of Tidal Prism: Measured Delay: Measured Delay: Start: Finish: Date of Highest Tide: Max Measured Tidal Dampening: Max Measured Tidal Dampe			
Measured Delay: Measured Delay: Start: Finish:			
Relative Cost/Acre 220,000 Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening:	Construction Cost 75,000		
Dates of 2nd Survey: Date of Highest Tide: Max Measured Tidal Dampening:	Total Cost 110,000	Measured Delay:	
Date of Highest Tide: Max Measured Tidal Dampening:	Relative Cost/Acre 220,000	Start: Finish:	
Max Measured Tidal Dampening:		Dates of 2nd Survey:	
		Date of Highest Tide:	
		Max Measured Tidal Dampening:	
Percent of Tidal Prism:		Percent of Tidal Prism:	

Summary				
Uniqueness / Heritage Value:	Medium	Ecological Integrity:	Medium	
Recreational Value:	High	Logistics / Feasibility:	High	
Educational Value:	High			
		Restoration Potential: Moderate		

Measured Delay: